

J. RILEY

11A11

CRF Errors Corrected by the STIC Systems Branch

CRF Processing Date: 11/19/2002  
 Edited by: M. Spencer  
 Verified by: \_\_\_\_\_ (STIC staff)

Serial Number: 09/786,666

**ENTERED**

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☒ Other: Changed location in SEQ ID #13 to 16 from 14

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form. 3/1/95



1600

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002

TIME: 14:21:12

Input Set : A:\ptoms.txt

Output Set: N:\CRF4\11192002\I786666.raw

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3 <110> APPLICANT: Hawkins, Mary E.
4     Pfleiderer, Wolfgang
5     Balis, Frank
6     The Government of the United States of America
7     as represented by The Secretary of the
8     Department of Health and Human Services
10 <120> TITLE OF INVENTION: Pteridine Nucleotide Analogs
12 <130> FILE REFERENCE: 015280-351100US
14 <140> CURRENT APPLICATION NUMBER: US 09/786,666
15 <141> CURRENT FILING DATE: 2001-03-07
17 <150> PRIOR APPLICATION NUMBER: US 60/099,487
18 <151> PRIOR FILING DATE: 1998-09-08
20 <150> PRIOR APPLICATION NUMBER: WO PCT/US99/20541
21 <151> PRIOR FILING DATE: 1999-09-07
23 <160> NUMBER OF SEQ ID NOS: 22
25 <170> SOFTWARE: PatentIn Ver. 2.1
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28 <211> LENGTH: 21
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
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33 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
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36 <220> FEATURE:
37 <221> NAME/KEY: modified_base
38 <222> LOCATION: (7)
39 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
40     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
41     N-diisopropyl)phosphoramidite (6MAP, compound 11)
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W--> 44 gtgtggnaaa tctctagcag t                                     21
47 <210> SEQ ID NO: 2
48 <211> LENGTH: 21
49 <212> TYPE: DNA
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56 <220> FEATURE:
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58 <222> LOCATION: (10)
59 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
60     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl

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61      N-diisopropyl)phosphoramidite (6MAP, compound 11)
63 <400> SEQUENCE: 2
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69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial Sequence
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73 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
74      PTR23
76 <220> FEATURE:
77 <221> NAME/KEY: modified_base
78 <222> LOCATION: (16)
79 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
80      beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
81      N-diisopropyl)phosphoramidite (6MAP, compound 11)
83 <400> SEQUENCE: 3
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99 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
100     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
101     N-diisopropyl)phosphoramidite (6MAP, compound 11)
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118 <222> LOCATION: (9)
119 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
120     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
121     N-diisopropyl)phosphoramidite (6MAP, compound 11)
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W--> 124 actgctagng attttccaca c                                21
127 <210> SEQ ID NO: 6

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DATE: 11/19/2002

TIME: 14:21:12

Input Set : A:\ptoms.txt

Output Set: N:\CRF4\11192002\I786666.raw

128 <211> LENGTH: 21  
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 138 <222> LOCATION: (11)  
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 141 N-diisopropyl)phosphoramidite (6MAP, compound 11)  
 143 <400> SEQUENCE: 6

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21

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 157 <221> NAME/KEY: modified\_base  
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 161 N-diisopropyl)phosphoramidite (6MAP, compound 11)  
 163 <400> SEQUENCE: 7

W--&gt; 164 attccacaan gccgtgtca

19

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 169 <212> TYPE: DNA  
 170 <213> ORGANISM: Artificial Sequence  
 172 <220> FEATURE:  
 173 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide  
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 178 <222> LOCATION: (11)  
 179 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-  
 180 beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
 181 N-diisopropyl)phosphoramidite (6MAP, compound 11)  
 183 <400> SEQUENCE: 8

W--&gt; 184 agaggtgtcc ncctgtggag a

21

187 <210> SEQ ID NO: 9  
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 189 <212> TYPE: DNA  
 190 <213> ORGANISM: Artificial Sequence  
 192 <220> FEATURE:

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TIME: 14:21:12

Input Set : A:\ptoms.txt

Output Set: N:\CRF4\11192002\I786666.raw

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193 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
194      HP23
196 <220> FEATURE:
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198 <222> LOCATION: (11)
199 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
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201      N-diisopropyl)phosphoramidite (6MAP, compound 11)
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218 <222> LOCATION: (11)
219 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
220      beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
221      N-diisopropyl)phosphoramidite (6MAP, compound 11)
223 <400> SEQUENCE: 10
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227 <210> SEQ ID NO: 11
228 <211> LENGTH: 21
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
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233 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
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236 <220> FEATURE:
237 <221> NAME/KEY: modified_base
238 <222> LOCATION: (7)
239 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-
dimethoxytrityl)-
240      beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
241      N-diisopropyl)phosphoramidite (DMAP, compound 12)
243 <400> SEQUENCE: 11
W--> 244 gtgtggnaaa tctctagcag t 21
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253 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
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256 <220> FEATURE:
257 <221> NAME/KEY: modified_base

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002

TIME: 14:21:12

Input Set : A:\ptoms.txt

Output Set: N:\CRF4\11192002\I786666.raw

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258 <222> LOCATION: (10)
259 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-
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260     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
261     N-diisopropyl)phosphoramidite (DMAP, compound 12)
263 <400> SEQUENCE: 12
W--> 264 gtgtggaaan tctctagcag t
267 <210> SEQ ID NO: 13
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269 <212> TYPE: DNA
270 <213> ORGANISM: Artificial Sequence
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280     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
281     N-diisopropyl)phosphoramidite (DMAP, compound 12)
283 <400> SEQUENCE: 13
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287 <210> SEQ ID NO: 14
288 <211> LENGTH: 21
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290 <213> ORGANISM: Artificial Sequence
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294     PTR34
296 <220> FEATURE:
297 <221> NAME/KEY: modified_base
298 <222> LOCATION: (7)
299 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-
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300     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
301     N-diisopropyl)phosphoramidite (DMAP, compound 12)
303 <400> SEQUENCE: 14
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307 <210> SEQ ID NO: 15
308 <211> LENGTH: 21
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
314     PTR35
316 <220> FEATURE:
317 <221> NAME/KEY: modified_base
318 <222> LOCATION: (9)
319 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-
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320     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
321     N-diisopropyl)phosphoramidite (DMAP, compound 12)

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002  
TIME: 14:21:13

Input Set : A:\ptoms.txt  
Output Set: N:\CRF4\11192002\I786666.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 7  
Seq#:2; N Pos. 10  
Seq#:3; N Pos. 16  
Seq#:4; N Pos. 7  
Seq#:5; N Pos. 9  
Seq#:6; N Pos. 11  
Seq#:7; N Pos. 10  
Seq#:8; N Pos. 11  
Seq#:9; N Pos. 11  
Seq#:10; N Pos. 11  
Seq#:11; N Pos. 7  
Seq#:12; N Pos. 10  
Seq#:13; N Pos. 16  
Seq#:14; N Pos. 7  
Seq#:15; N Pos. 9  
Seq#:16; N Pos. 11  
Seq#:17; N Pos. 18  
Seq#:18; N Pos. 11  
Seq#:19; N Pos. 10  
Seq#:20; N Pos. 11  
Seq#:21; N Pos. 11  
Seq#:22; N Pos. 11

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002

TIME: 14:21:13

Input Set : A:\ptoms.txt

Output Set: N:\CRF4\11192002\I786666.raw

L:44 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
L:444 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
L:464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0



**Does Not Comply  
Corrected Diskette Needed**



1600

**RAW SEQUENCE LISTING**

PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002

TIME: 14:07:20

Input Set : A:\Nih-3511.app

Output Set: N:\CRF4\11192002\I786666.raw

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3 <110> APPLICANT: Hawkins, Mary E.
4   Pfleiderer, Wolfgang
5   Balis, Frank
6   The Government of the United States of America
7   as represented by The Secretary of the
8   Department of Health and Human Services
10 <120> TITLE OF INVENTION: Pteridine Nucleotide Analogs
12 <130> FILE REFERENCE: 015280-351100US
14 <140> CURRENT APPLICATION NUMBER: US 09/786,666
15 <141> CURRENT FILING DATE: 2001-03-07
17 <150> PRIOR APPLICATION NUMBER: US 60/099,487
18 <151> PRIOR FILING DATE: 1998-09-08
20 <150> PRIOR APPLICATION NUMBER: WO PCT/US99/20541
21 <151> PRIOR FILING DATE: 1999-09-07
23 <160> NUMBER OF SEQ ID NOS: 22
25 <170> SOFTWARE: PatentIn Ver. 2.1
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40   beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
41   N-diisopropyl)phosphoramidite (6MAP, compound 11)
43 <400> SEQUENCE: 1
W--> 44 gtgtggnaaa tctctagcag t                                     21
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58 <222> LOCATION: (10)
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60   beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl

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PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002

TIME: 14:07:20

Input Set : A:\Nih-3511.app

Output Set: N:\CRF4\11192002\I786666.raw

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61      N-diisopropyl)phosphoramidite (6MAP, compound 11)
63 <400> SEQUENCE: 2
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81      N-diisopropyl)phosphoramidite (6MAP, compound 11)
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100     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
101     N-diisopropyl)phosphoramidite (6MAP, compound 11)
103 <400> SEQUENCE: 4
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113 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
114     PTR25
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117 <221> NAME/KEY: modified_base
118 <222> LOCATION: (9)
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121     N-diisopropyl)phosphoramidite (6MAP, compound 11)
123 <400> SEQUENCE: 5
W--> 124 actgctagng attttccaca c                                21
127 <210> SEQ ID NO: 6

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002

TIME: 14:07:20

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Output Set: N:\CRF4\11192002\I786666.raw

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128 <211> LENGTH: 21
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133 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
134     PTR28
136 <220> FEATURE:
137 <221> NAME/KEY: modified_base
138 <222> LOCATION: (11)
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140     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
141     N-diisopropyl)phosphoramidite (6MAP, compound 11)
143 <400> SEQUENCE: 6                                21
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148 <211> LENGTH: 19
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
154     HP21
156 <220> FEATURE:
157 <221> NAME/KEY: modified_base
158 <222> LOCATION: (10)
159 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
160     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
161     N-diisopropyl)phosphoramidite (6MAP, compound 11)
163 <400> SEQUENCE: 7                                19
W--> 164 attccacaan gccgtgtca
167 <210> SEQ ID NO: 8
168 <211> LENGTH: 21
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
174     HP22
176 <220> FEATURE:
177 <221> NAME/KEY: modified_base
178 <222> LOCATION: (11)
179 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
180     beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
181     N-diisopropyl)phosphoramidite (6MAP, compound 11)
183 <400> SEQUENCE: 8                                21
W--> 184 agaggtgtcc nctgtggag a
187 <210> SEQ ID NO: 9
188 <211> LENGTH: 21
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial Sequence
192 <220> FEATURE:

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002

TIME: 14:07:20

Input Set : A:\Nih-3511.app

Output Set: N:\CRF4\11192002\I786666.raw

```

193 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
194      HP23
196 <220> FEATURE:
197 <221> NAME/KEY: modified_base
198 <222> LOCATION: (11)
199 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
200      beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
201      N-diisopropyl)phosphoramidite (6MAP, compound 11)
203 <400> SEQUENCE: 9
21
W--> 204 agaggtgtac nagtgtggag a
207 <210> SEQ ID NO: 10
208 <211> LENGTH: 21
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
214      HP24
216 <220> FEATURE:
217 <221> NAME/KEY: modified_base
218 <222> LOCATION: (11)
219 <223> OTHER INFORMATION: n = 4-amino-6-methyl-8-[-2-deoxy-5-O-(4,4'-dimethoxytrityl)-
220      beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
221      N-diisopropyl)phosphoramidite (6MAP, compound 11)
223 <400> SEQUENCE: 10
21
W--> 224 agaggtgtaa naatgtggag a
227 <210> SEQ ID NO: 11
228 <211> LENGTH: 21
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
234      PTR31
236 <220> FEATURE:
237 <221> NAME/KEY: modified_base
238 <222> LOCATION: (7)
239 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-
dimethoxytrityl)-
240      beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl
241      N-diisopropyl)phosphoramidite (DMAP, compound 12)
243 <400> SEQUENCE: 11
21
W--> 244 gtgtggnaaa tctctagcag t
247 <210> SEQ ID NO: 12
248 <211> LENGTH: 21
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
254      PTR32
256 <220> FEATURE:
257 <221> NAME/KEY: modified_base

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002  
TIME: 14:07:20

Input Set : A:\Nih-3511.app  
Output Set: N:\CRF4\11192002\I786666.raw

258 <222> LOCATION: (10)  
259 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-  
dimethoxytrityl)-  
260 beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
261 N-diisopropyl)phosphoramidite (DMP, compound 12) 21  
263 <400> SEQUENCE: 12  
W--> 264 gtgtggaaan tctctagcag t  
267 <210> SEQ ID NO: 13  
268 <211> LENGTH: 21  
269 <212> TYPE: DNA  
270 <213> ORGANISM: Artificial Sequence  
272 <220> FEATURE:  
273 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide  
274 PTR33  
276 <220> FEATURE:  
277 <221> NAME/KEY: modified\_base  
278 <222> LOCATION: (14) *'n' located at position 16*  
279 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-  
dimethoxytrityl)-  
280 beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
281 N-diisopropyl)phosphoramidite (DMP, compound 12) 21  
283 <400> SEQUENCE: 13  
W--> 284 gtgtggaaaa tctctngcag t  
287 <210> SEQ ID NO: 14  
288 <211> LENGTH: 21  
289 <212> TYPE: DNA  
290 <213> ORGANISM: Artificial Sequence  
292 <220> FEATURE:  
293 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide  
294 PTR34  
296 <220> FEATURE:  
297 <221> NAME/KEY: modified\_base  
298 <222> LOCATION: (7)  
299 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-  
dimethoxytrityl)-  
300 beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
301 N-diisopropyl)phosphoramidite (DMP, compound 12) 21  
303 <400> SEQUENCE: 14  
W--> 304 actgctngag atttccaca c  
307 <210> SEQ ID NO: 15  
308 <211> LENGTH: 21  
309 <212> TYPE: DNA  
310 <213> ORGANISM: Artificial Sequence  
312 <220> FEATURE:  
313 <223> OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide  
314 PTR35  
316 <220> FEATURE:  
317 <221> NAME/KEY: modified\_base  
318 <222> LOCATION: (9)  
319 <223> OTHER INFORMATION: n = 4-amino-2,6-dimethyl-8-[-2-deoxy-5-O-(4,4'-  
dimethoxytrityl)-  
320 beta-D-ribofuranosyl]-7(8H)-pteridone-3'-O-(H-beta-cyanoethyl  
321 N-diisopropyl)phosphoramidite (DMP, compound 12)

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002  
TIME: 14:07:21

Input Set : A:\Nih-3511.app  
Output Set: N:\CRF4\11192002\I786666.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 7  
Seq#:2; N Pos. 10  
Seq#:3; N Pos. 16  
Seq#:4; N Pos. 7  
Seq#:5; N Pos. 9  
Seq#:6; N Pos. 11  
Seq#:7; N Pos. 10  
Seq#:8; N Pos. 11  
Seq#:9; N Pos. 11  
Seq#:10; N Pos. 11  
Seq#:11; N Pos. 7  
Seq#:12; N Pos. 10  
Seq#:13; N Pos. 16  
Seq#:14; N Pos. 7  
Seq#:15; N Pos. 9  
Seq#:16; N Pos. 11  
Seq#:17; N Pos. 18  
Seq#:18; N Pos. 11  
Seq#:19; N Pos. 10  
Seq#:20; N Pos. 11  
Seq#:21; N Pos. 11  
Seq#:22; N Pos. 11

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/786,666

DATE: 11/19/2002

TIME: 14:07:21

Input Set : A:\Nih-3511.app

Output Set: N:\CRF4\11192002\I786666.raw

L:44 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
L:444 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
L:464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0